

PARENT PERCEPTIONS OF SERVICES AT COMMUNITY SERVICE BOARDS

**Outpatient Mental Health Services Provided to Children and Adolescents
Youth Services Survey for Families Results
FY 2005**



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EXECUTIVE SUMMARY

Background

The Virginia Department of Mental Health, Mental Retardation, and Substance Abuse Services (DMHMRSAS) has identified caregiver¹ perceptions of Community Services Board's (CSBs) services provided to children and adolescents as a performance measure to be assessed on an annual basis. Caregiver's perceptions are monitored in five areas that have been identified as important indicators of the quality of services and are used for national reporting of the public mental health service system's performance. A new measure for caregiver social connectedness was piloted this year as part of the Data Infrastructure Grant (DIG). A social connectedness domain will be included as part of the *National Outcomes Measures* once the reporting methodology is finalized.

The domains used to evaluate children's mental health services include:

- Access - defined as the percentage of caregivers who reported good access to CSB services.
- Cultural sensitivity – defined as the percentage of caregivers who perceive CSB service providers to be respectful and sensitive to their differences.
- Family participation in treatment – defined as the percentage of caregivers who reported participation in their child's treatment.
- Satisfaction with services - defined as the percentage of caregivers who reported general satisfaction with CSB services.
- Outcome - defined as the percentage of caregivers who reported positive change in their child as a result of the services they received through the CSB.

Caregiver perceptions of services are assessed using the Youth Services Survey for Families (YSSF), a measure developed for the federal Mental Health Statistics Improvement Program's (MHSIP) *Consumer-Oriented Mental Health Report Card*. DMHMRSAS administered its fifth annual statewide survey to a randomly selected sample of caregivers of children and adolescents who received at least one non-emergency outpatient service during the fiscal year 2005. A mail survey methodology was used to ensure that the results were representative of all youth receiving services during the fiscal year. This report summarizes the survey findings and compares those findings to previous Virginia DMHMRSAS administrations of the survey and to national benchmarks.

It is important to note that this report only reflects perceptions of caregivers who were able to obtain mental health services. There continues to be a significant number of families in the Commonwealth who remain on waiting lists for services. Therefore, the results reported here cannot address the question of whether there is an adequate amount of services provided; they can only speak to the quality of services that are provided.

Demographic Findings

All 40 CSBs contributed survey respondents to the final sample of 1,272 caregivers. This number represents a 23.7% return rate and is of sufficient size to have a high degree of confidence that the

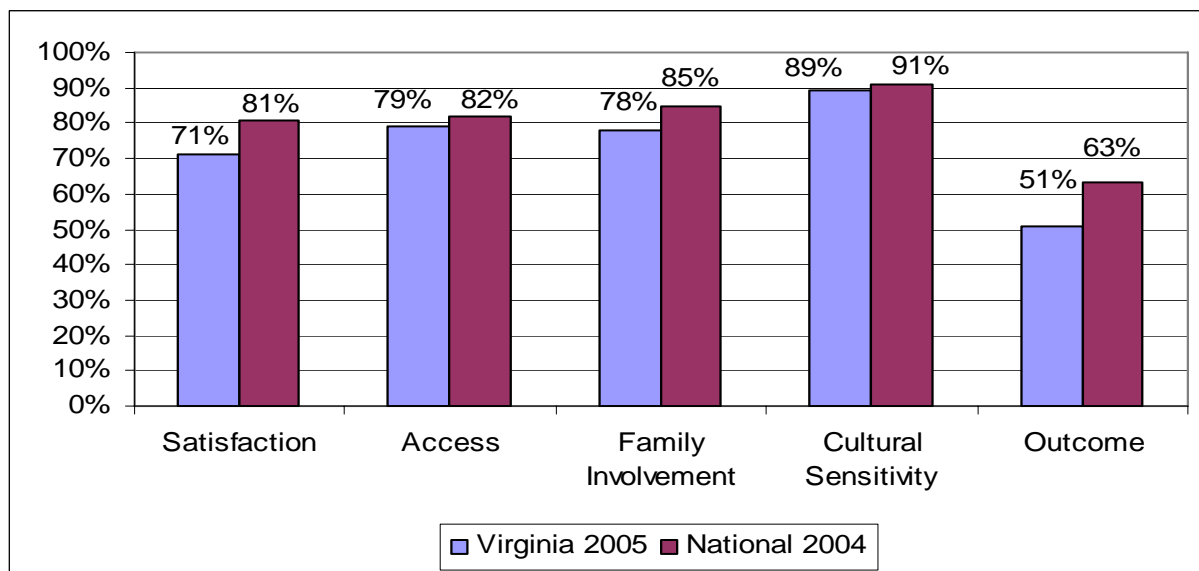
¹ While the majority of respondents were parents of the child receiving services, grandparents or others serving as the child's primary caregiver completed many surveys. The term "caregiver" will be used throughout this report to refer to any person serving as the child's primary caregiver.

results are representative of those that would be obtained if all caregivers statewide had been surveyed. The majority (90.5%) of the respondents identified themselves as a parent or other family member. They described their children as follows:

- The majority of youth was White (63.9%), male (65%), between the ages of 13 and 18 years old (56.7%), and lived exclusively with a parent or other family member in the last six months (76.7%).
- Most of the youth (72%) had Medicaid or FAMIS insurance.
- Half (50.7%) had received services for more than one year and 60.4% were still in services.

Performance Indicator Findings

Overall, caregivers report positive perceptions of the services their child received. Perceptions of access and cultural sensitivity are comparable to the national figures; however, in the domains of satisfaction, family involvement and outcomes, Virginia caregivers are significantly less positive than the national average. Several methodological differences exist between the Virginia survey and the national surveys that could account for these differences. The majority of states survey only caregivers whose children are still receiving services while Virginia has respondents who are no longer in service. The latter have a tendency to have lower perceptions of care.



How have caregiver perceptions of care changed over time?

This report looked at perceptions of care over time for two separate groups, those still receiving services and those no longer in services. For both groups, caregiver perceptions of care were similar to those reported in FY2004, however, there was a slight non-significant downward trend in caregivers' perceptions of involvement in service planning and positive outcome. Given that previous survey findings have demonstrated that family involvement in treatment is one of the strongest predictors of positive outcomes, this trend should be monitored and policies developed to improve caregiver involvement and outcomes.

Limitations

There are several limitations to consider when interpreting the results of this survey. They include:

- Cross-sectional nature of the survey. Without measures of baseline functioning for comparison, the survey measures of youth functioning can only be interpreted as a snapshot of how the youth are doing currently. Therefore, these indicators should only be used to provide a picture of the system performance over time. They are not true measures of the effectiveness of the services provided.
- Sample sizes at the CSB level are too small to be representative of population served at that CSB. The individual CSB results are provided to provide a rough estimate about how services at each CSB are perceived, however, CSBs should not be compared to each other on the basis of these findings.

Despite these limitations, the results of this survey provide valid and useful information about the outpatient services provided to children and adolescents through Virginia's public mental health system. Repeated assessment of the statewide service system will provide an opportunity to evaluate whether specific initiatives can have an impact on caregiver perceptions of positive outcome.

Overall, caregivers perceive public mental health services for their children positively but there is room for improvement. Policies should target strategies to improve positive outcomes for youth served in the public mental health system. The FY2004 report identified several factors that contribute most to positive perceptions of outcome. They included 1) caregiver involvement in services, 2) no out of home placements, and 3) caregiver satisfaction with the type and amount of services. These findings are supported with the results from the current survey. Therefore, in order to improve outcomes, policies are needed that encourage providers to use the following "best practices" more frequently.

- involve caregivers in choosing treatment services and goals for their children
- provide sufficient services to meet the child's needs (many children and adolescents with serious emotional and behavioral difficulties will need services for more than one year)
- provide services that are effective in preventing out of home placements.

Outpatient Mental Health Services Provided to Children and Adolescents: FY 2005

INTRODUCTION

Purpose of the Survey

The Virginia Department of Mental Health, Mental Retardation, and Substance Abuse Services (DMHMRSAS) has identified caregiver² perceptions of Community Services Board's (CSBs) services provided to children and adolescents as a performance measure to be assessed on an annual basis. Therefore, DMHMRSAS administered its fourth annual statewide survey to caregivers of children and adolescents who received at least one non-emergency outpatient service during the fiscal year 2005.

This report summarizes the survey findings and compares those findings to previous Virginia DMHMRSAS administrations of the survey and to national benchmarks. The review of important aspects of care over time provides the Department with information to evaluate the services it supports and helps the Department to identify areas that have the potential to improve outcomes for children with serious emotional disturbance.

It is important to note that perceptions of caregivers who could not obtain mental health services were not sampled. There continues to be a significant number of families in the Commonwealth who remain on waiting lists for services. Therefore, the results reported here cannot address the question of whether there is an adequate amount of services provided; they can only speak to the quality of services that are provided.

METHODOLOGY

Measure

The Youth Services Survey for Families (YSSF: Brunk, Koch, & McCall, 2000) is used to assess caregiver's perceptions of the services their child received at a community mental health center. It was developed for the Mental Health Statistics Improvement Program's (MHSIP) *Consumer-Oriented Mental Health Report Card* and is recommended for national reporting of performance indicators. The YSSF used in 2005 included the original 22 items used to calculate the national performance indicators and 10 new items that were being piloted as part of Virginia's Data Infrastructure Grant. This grant is funding a multi-state effort to identify reliable and valid measures for inclusion in the National Outcomes Measures for the Substance Abuse and Mental Health Services Administration. A number of other questions are included to identify the demographic characteristics of the sample of respondents. A copy of the survey is included in Appendix A.

The original survey items are designed to measure five domains that have been identified as important indicators of quality of services for children and adolescents. The domains include access,

² While the majority of respondents were parents of the child receiving services, grandparents or others serving as the child's primary caregiver completed many surveys. The term "caregiver" will be used throughout this report to refer to any person serving as the child's primary caregiver.

cultural sensitivity, family participation in treatment, outcome, and satisfaction with services. Domain scores are calculated by taking the average of the scores on all items related to one of the scales. Scores range from “Strongly disagree” = 1 to “Strongly agree” = 5. A score of 3.5 or more indicates agreement with the items included in the scale. For example, the domain “Percentage of consumer's parents who report participating in child's treatment” is calculated by first taking the average of a respondent's scores on the items in the Family Involvement scale (Items 2, 3 & 6). Then the percentage for the domain is determined by the number of respondents with an average scale score > 3.5 divided by the total number of respondents.

The *National Outcomes Measures* has identified the area of increased social supports as an important outcome for public mental health services. There is growing awareness in the research and provider communities that increasing caregiver connections to supportive social relationships can provide long-term benefits to all children and families affected by mental health difficulties. Given that more models of community-based care (including wraparound, multisystemic therapy, and intensive family preservation) are targeting goals of improved connections to supportive people within the family's own social environment; it is critical that a standardized measure be developed that can help to identify which interventions are successful at achieving this goal. Therefore, seven new items were included in the survey that ranged from “not applicable” = 0 to “Strongly agree” = 5. The reliability and validity of these items were assessed as well as their relationship to other items in the survey. Given that this is still a developmental measure, the items are not included in the calculation of performance indicators.

Administration of the Survey

In order to select a sample of caregivers to receive a survey in the mail, CSBs were asked to provide DMHMRSAS with a file that identified all children in the Child Mental Health Priority Population³ that received at least one mental health service from the child and adolescent programs during the months of September through December 2004. These youth also met the federal criteria for youth with serious emotional disturbance (SED). The data file contained basic demographic information such as date of birth, race, ethnicity and gender of the youth in addition to mailing addresses. All forty CSBs provided files and, as a result, contributed to the final sample.

In April 2005, DMHMRSAS selected a random sample of youth from the submitted files to receive a survey. A total sample of 5,921 youth was selected to represent the population of an approximately 14,133 youth with SED receiving services in the fiscal year ending in 2005. The DMHMRSAS contracted with the Social Science Research Center at Old Dominion University to conduct a mail survey of the sample. Surveys were mailed to the parents identified in the sample along with a cover letter that explained the purpose of the survey, identified the CSB that had provided services, and informed recipients of the risks and benefits of returning the survey. The first wave of surveys was mailed to recipients beginning in June 2005. A second survey was mailed one month later to anyone who had not yet returned the survey. In order to combine the survey data with demographic information in the CSB files, a unique number was assigned to each youth in the sample and that number was included on the survey. The data for this report include all surveys received by end of September 2005.

³ A copy of the checklist used to identify youth meeting criteria for the child mental health priority population is included in Appendix B.

A total of 1,272 *unduplicated* valid surveys were returned and only 28 respondents refused or returned blank surveys. A small number of the total sample, 548 (9%) had incomplete addresses. When this number of respondents was removed from the original sample, the number of respondents who actually received a survey was reduced to 5,373 and the resulting overall return rate was 23.7%. This number achieved the 95 percent confidence level and a confidence interval of +/- 5% for the statewide sample.

Figure 1: Overall Response Rate by CSB

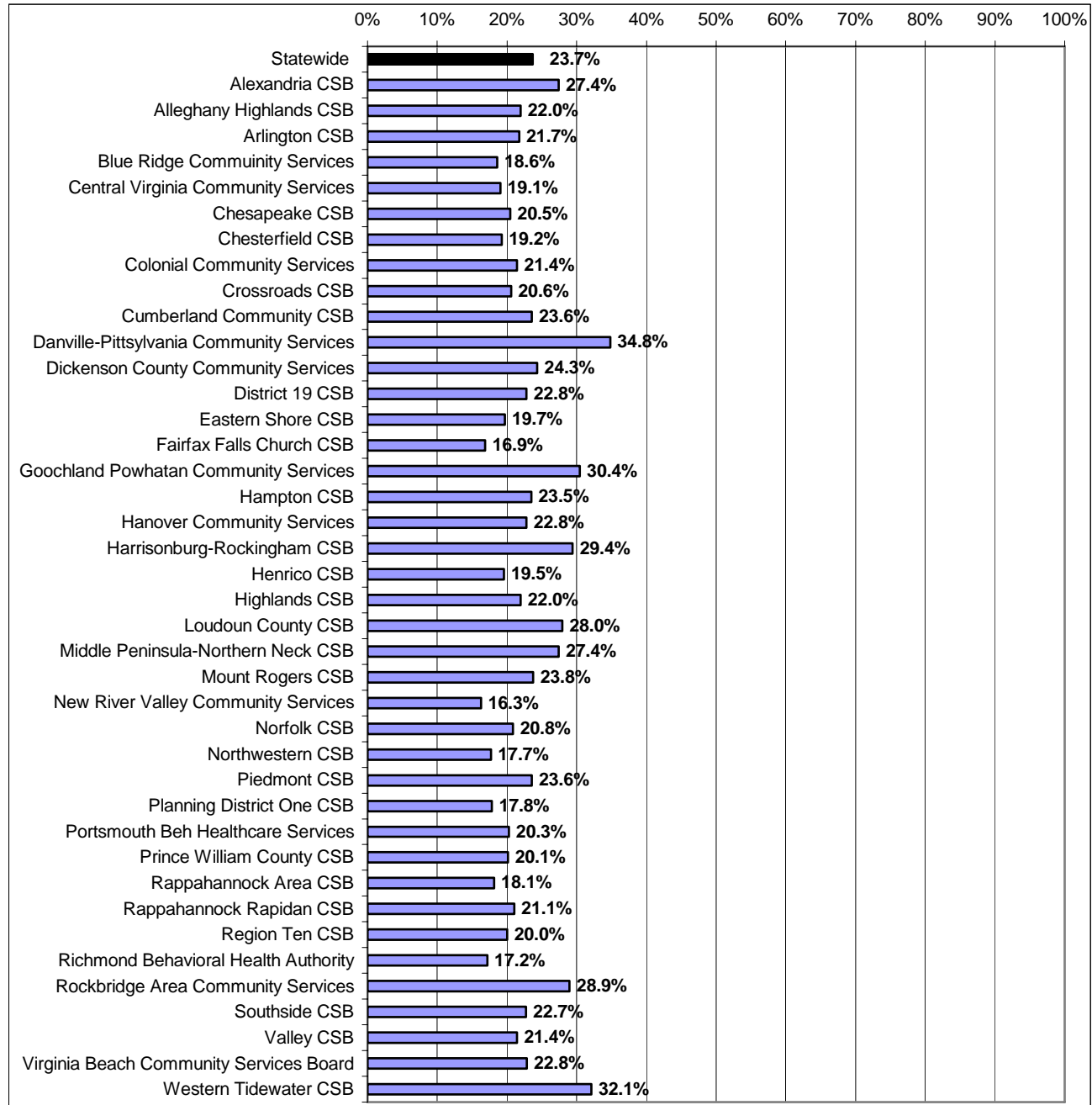


Figure 1 displays response rates by CSB. Eight CSBs reported response rates 5% greater than the state average, while only one CSB reported response rates 5% lower. Appendix C provides statistics on the number of completed surveys per CSB. For those CSBs with more than 15 completed surveys, an individual agency report will be provided to that CSB.

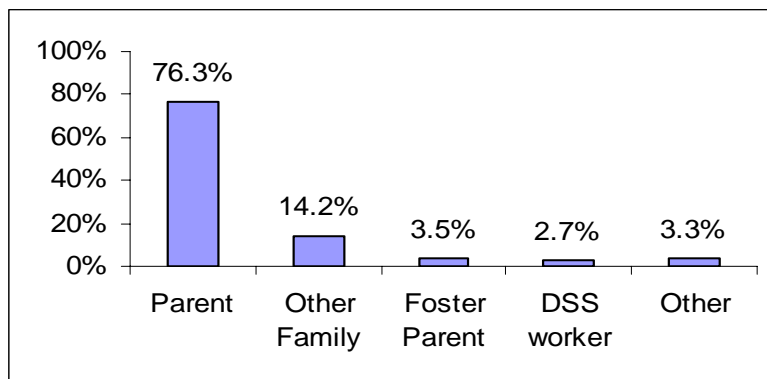
STATEWIDE SURVEY RESPONSES

Description of Sample

Respondent relationship to youth receiving services

Of the 1,272 respondents to the survey, 1,225 provided information about their relationship to the identified child. The majority of the respondents identified themselves as a parent or other family member (90.5%).

Figure 2: Sample by Respondent Type

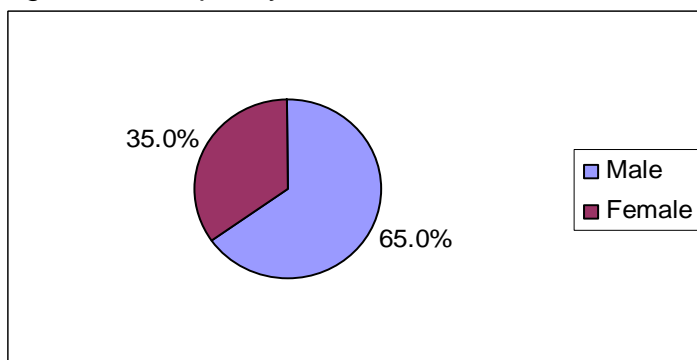


Demographic information was available on the youth who received mental health services from caregiver report and CSB data files. The youth in the sample had the following characteristics.

Gender

- The majority of the youth in the survey sample was male (N=1,264).

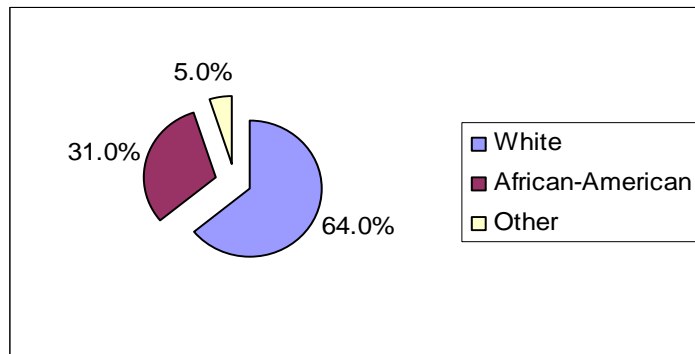
Figure 3: Sample by Gender



Race

- About 31% of the 1,256 caregivers identified their child as African-American, while 64% were identified as White.

Figure 4: Sample by Race



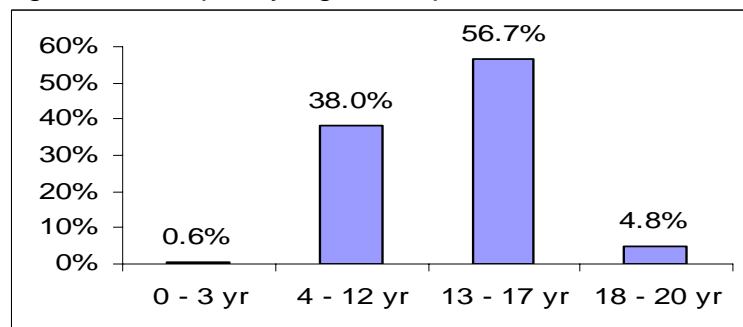
Ethnicity

- 4.4% of the 1,226 caregivers responding to the question about ethnicity identified their child as Hispanic.

Age

- The majority of the youth receiving services were adolescents. The average age was 13.6 years with a range from less than 1 year to 19.3 years (N = 1,265).

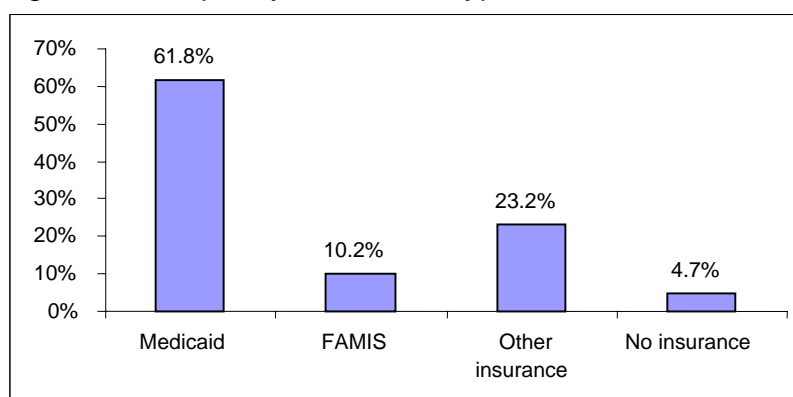
Figure 5: Sample by Age Group



Insurance

- The majority of the youth had Medicaid insurance or other insurance (N = 1,171).

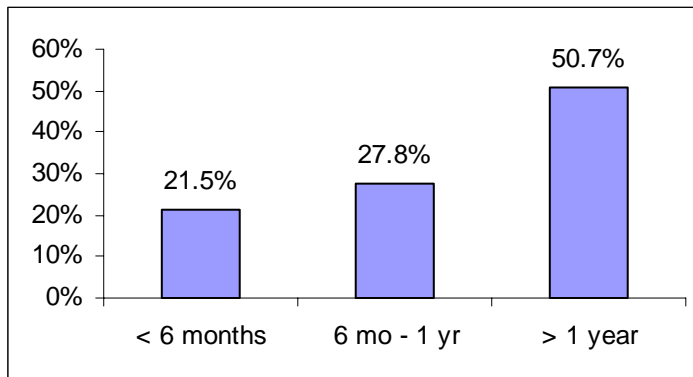
Figure 6: Sample by Insurance Type



Service Involvement

- The majority of youth (60.4%) were still receiving services from the CSB (N=1,246).
- Half (50.7%) of the 1,216 caregivers responding to question about length of time in service reported the child had been in service more than one year.

Figure 7: Sample by Length of Time in Services



Medication

- A little more than 62% of the youth (N = 1,245) were on medication for emotional/behavioral problems.
- For those on medication (N = 911), 76% reported they were told about the side effects of the medicine.

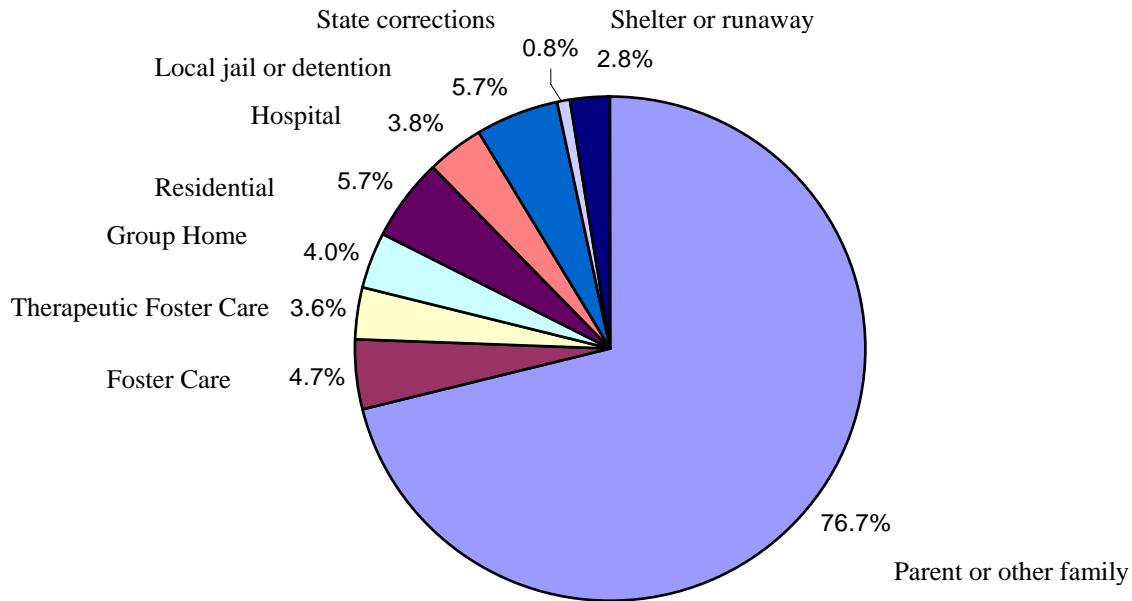
Descriptions of Youth Functioning

The YSSF contains several questions to obtain the parent's report on how the child is doing in several critical areas of functioning (e.g., “is the child in the home, in school, and out of trouble?”). Since the survey was conducted at a single point in time, these indicators cannot be interpreted as an indicator of the outcome of the services, only as a description of the population served by the service system.

Placements in the Last Six Months

- Almost 83% of youth lived in only home-like settings during the six months (N = 973). Home-like settings include living with parents or other family members and foster care placements (regular and therapeutic).
- Overall, 23% of youth resided in some type of out of home placement in the last six months (N = 973).
- Four percent had 2 or more placements in six months prior to the survey (N = 973).
- A little more than 2% of youth were homeless in the last six months (N=1,147) with the number of days homeless ranging from 1 to 90 days.
- Ten percent (10%) had moved in the last month, ranging from 1 to 6 moves (N = 1,166).
- The percent of youth in different types of settings is displayed in following figure. Numbers of youth are duplicated since youth could have been in multiple settings during the period (N = 997).

Figure 8: Percent of Youth Residing in Setting During Six Months Prior to Survey



Current Living Situation

- A little more than 87% of youth were currently living with the respondent (N = 1,205).
- Ninety percent (90%) of caregivers reported satisfaction with youth's current living situation (N = 1,195).

Community Indicators of Functioning

- About 77% of youth (N = 973) lived *only at home* with a parent or other family member in the last six months. This percentage is based on an unduplicated measure of placements.
- Almost 91% of caregivers (N = 1,248) reported that the youth had not been arrested in the last year.
- Almost 28% of youth were reported to be attending school more regularly since starting services (N=1,183).

Representativeness of the Survey Respondents to the Population

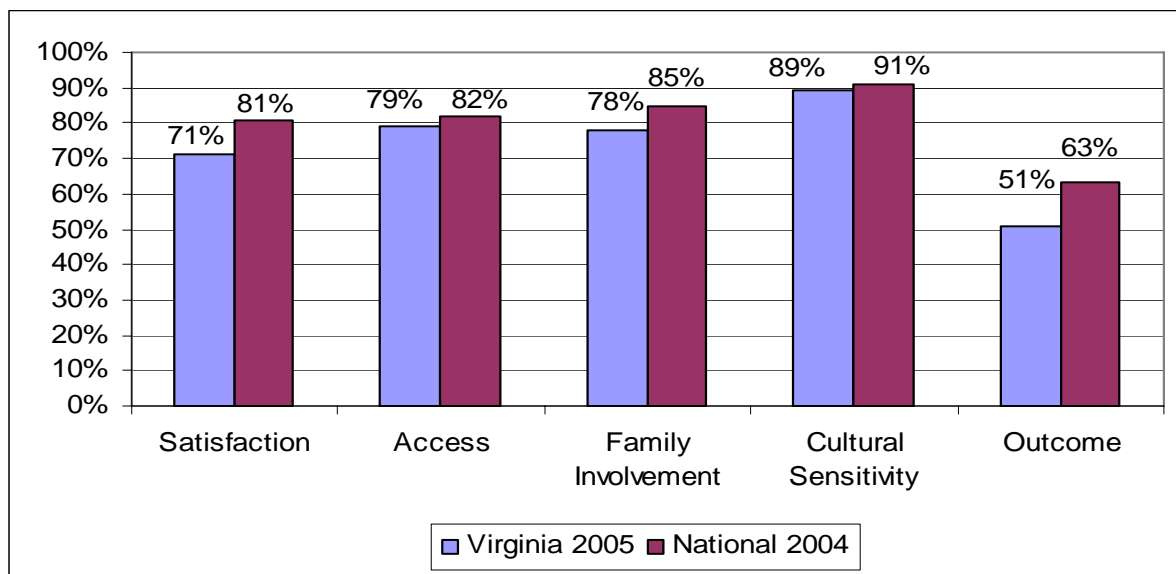
Demographic information from the Department's information system (CCS) is available on the approximately 14,133 youth with serious emotional disturbance who received mental health services in FY 2005. This information includes age, race, gender and Hispanic ethnicity of the youth. Comparison of the survey sample to the population figures indicates that the sample is representative of the overall population. Slightly fewer caregivers of children age 18 to 21 years responded to the survey than occur in the overall population, however, these differences were not significant. Therefore, the results presented in this report can be generalized to the overall population with confidence.

Caregiver Perceptions of Services

Overall, caregivers report positive perceptions of the services their child received. Perceptions of access and cultural sensitivity are comparable to the national figures; however, in the domains of satisfaction, family involvement and outcomes, Virginia caregivers are significantly less positive than the national average.

- Overall, 71.1% (+/- 2.64) of caregivers reported a positive perception with regard to the general satisfaction domain.
- About 79.3% (+/- 2.66) reported a positive perception on the access domain.
- Seventy eight percent (+/- 2.64) reported a positive perception of their participation in treatment planning for their child.
- More than 88.9% (+/- 2.66) reported a positive perception of the cultural sensitivity of staff.
- Finally, 50.8% (+/- 2.65) percent reported a positive perception on the outcome domain.

Figure 9: Comparison of Virginia & National Survey Results by Domain



Several methodological differences exist between the Virginia survey and the national surveys that could account for these differences. The majority of states survey only caregivers whose children are still receiving services while Virginia has respondents who are no longer in service. The latter have a tendency to have lower perceptions of care.

It is important to note that nearly 40% of respondents were not receiving services at the time of the survey and the results are likely to include some caregivers who discontinued services due to dissatisfaction with services. Therefore, these findings should not be compared to surveys that use a different methodology.

General Satisfaction Domain

- About 80% percent agreed with the statement “Overall, I am satisfied with the services my child received”.
- Seventy four percent agreed with the statement “The services my child and/or family received were right for us”.
- Almost 71% agreed with the statement “My family got the help we wanted for my child”.
- Only 64 % agreed with the statement “My family got as much help as we needed for my child”.
- Seventy seven percent agreed that the people helping stuck with them no matter what.
- About 76% agreed that their child had someone to talk to when he or she was troubled.

Access Domain

- About 88% agreed that the location of services is convenient.
- Almost 84% agreed that services were available at times that were good for them.

Caregiver Participation in Treatment Planning Domain

- Seventy nine percent agreed with the statement “I helped to choose my child’s services.”
- Almost 77% agreed with the statement “I helped to choose my child’s treatment goals.”
- About 90% agreed that they participated in their child’s treatment.

Cultural Sensitivity Domain

- About 86% agreed that staff was sensitive to their cultural/ethnic background.
- A little more than 92% reported staff treated them with respect.
- About 87% agreed with the statement “Staff respected my family’s religious/spiritual beliefs.”
- Almost 95% agreed with the statement “Staff spoke with me in a way that I understood.”

Outcome Domain

- About 51% agreed that their child was not bothered as much by his/her symptoms.
- Almost 56% agreed with the statement “My child is better at handling daily life”.
- About 59% agreed with the statement “My child gets along better with family members”.
- Sixty-two percent agreed that their child gets along better with friends and other people”.
- Almost 58% percent reported that their child did better at work or school as a result of services.
- Almost 48% reported that their child is better able to cope when things go wrong.
- Almost 60% reported that their child was better able to do things he/she wanted to do.
- Only 44% agreed with the statement “I am satisfied with our family life right now”.

Comparison to Previous Survey Administrations

The percentage of parents who agreed with an item is reported in Table 1 along with results of previous surveys. Agreement with an item is indicated when caregivers responded with “strongly agree” or “agree”. Item statistics including the mean and standard deviation are presented in Appendix D.

Table 1. Summary of Responses to YSSF Survey Items

ITEMS	% Agree 2002	% Agree 2003	% Agree 2004	% Agree 2005
1. Overall, I am satisfied with the services my child received.	74.5%	81.0%	81.4%	80.3%
2. I helped to choose my child's services.	74.3%	80.9%	80.0%	78.8%
3. I helped to choose my child's treatment goals.	74.8%	79.0%	78.7%	76.8%
4. The people helping my child stuck with us no matter what.	70.9%	77.7%	78.0%	77.0%
5. I felt my child had someone to talk to when he/she was troubled.	73.9%	77.0%	76.3%	75.8%
6. I participated in my child's treatment.	85.9%	91.3%	88.7%	89.9%
7. The services my child and/or family received were right for us.	68.7%	74.0%	74.0%	74.0%
8. The location of services was convenient for us.	85.3%	87.5%	87.2%	87.8%
9. Services were available at times that were convenient for us.	80.9%	83.6%	83.6%	84.3%
10. My calls were returned in 24 hours				77.3%
11. My family got the help we wanted for my child.	66.0%	70.4%	71.9%	71.0%
12. My family got as much help as we needed for my child.	56.3%	63.2%	64.2%	64.2%
13. I was able to get an appointment as soon as I wanted.	67.4%	74.4%	74.1%	
14. Staff treated me with respect.	89.3%	92.9%	92.3%	92.1%
15. Staff respected my family's religious/spiritual beliefs.	82.8%	86.1%	85.3%	86.7%
16. Staff spoke with me in a way that I understood.	92.0%	94.6%	94.7%	94.6%
17. Staff were sensitive to my cultural/ethnic background.	81.9%	85.6%	85.5%	85.4%
As a result of the services my child and family received:				
18. My child's symptoms are not bothering him/her as much				51.3%
19. My child is better at handling daily life.	53.6%	57.4%	59.6%	55.6%
20. My child gets along better with family members.	56.2%	61.1%	60.2%	58.8%
21. My child gets along better with friends and other people.	54.8%	59.1%	62.1%	61.5%
22. My child is doing better in school and/or work.	55.9%	59.0%	61.0%	57.5%
23. My child is better able to cope when things go wrong.	46.6%	47.9%	50.9%	47.8%
24. My child is better able to do things he/she wants to do.				59.7%
22. I am satisfied with our family life right now.	50.7%	53.4%	55.2%	43.9%
Note. The 2005 survey included several new items.				

Comparison of results of this survey with those of previous administrations indicates that caregiver's perceptions of services for children and adolescents have remained stable over time in the domains of access, participation in treatment planning, cultural sensitivity, satisfaction, and outcomes. One item indicated that significantly fewer caregivers report that they are "satisfied with our family life right now". Several new items were included to evaluate if they contributed additional information beyond the original items. The relationship of the new items with the original items is reported in the factor analysis results in Appendix F. In addition, Rasch analysis was conducted to evaluate the unidimensionality of the scale through principal components analysis of Rasch item residuals, overall fit and item fit to the Rasch model, rating scale structure, person and item reliability. This analysis was conducted to identify poorly fitting items and develop recommendations for improvement of the YSSF (see Appendix G). These recommendations were shared with the national workgroup charged with developing the final methodology for reporting the *National Outcome Measures*.

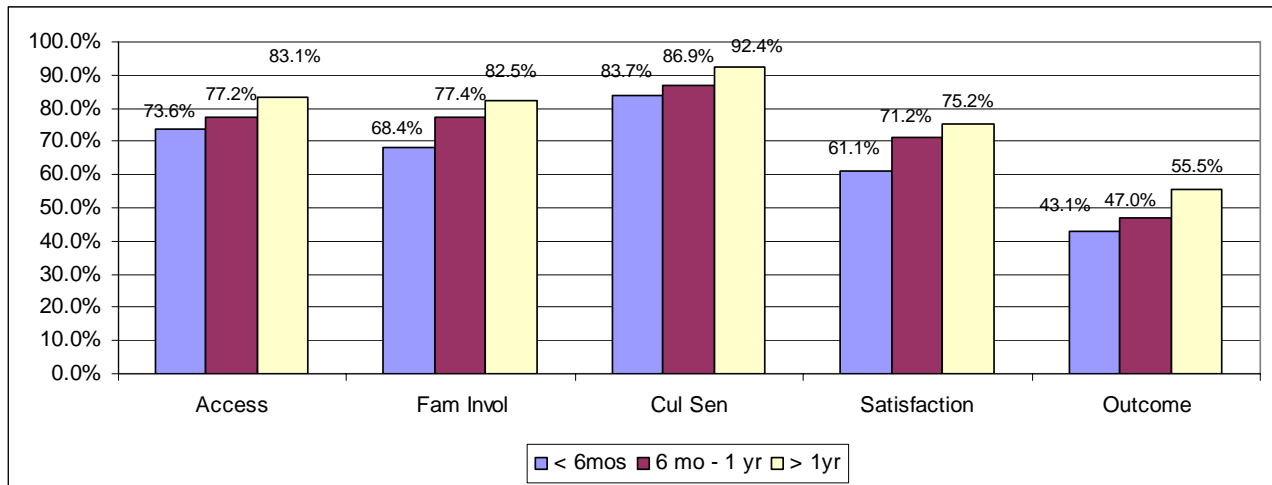
Differences Between Groups

Previous administrations of the YSSF have demonstrated that the performance indicator scores do not differ by most demographic variables, including age, gender, race, Hispanic ethnicity, medication status, or type of insurance. Therefore, those variables were not assessed for this report. Chi square analysis using SPSS 12.0 supported previous findings that indicator scores are significantly related to service length and service status (still in service vs. not in service).

Did Perceptions of Services Differ by Length of Time in Services?

On all domains of services, caregiver perceptions of care varied significantly by length of time in services ($p < .001$). Caregivers of youth, who had been in services for more than one year, reported more positive perceptions of access, family involvement, cultural sensitivity of staff, satisfaction and outcomes than caregivers of youth who received services for a shorter period of time.

Figure 10: Caregiver Perceptions by Length of Time in Services



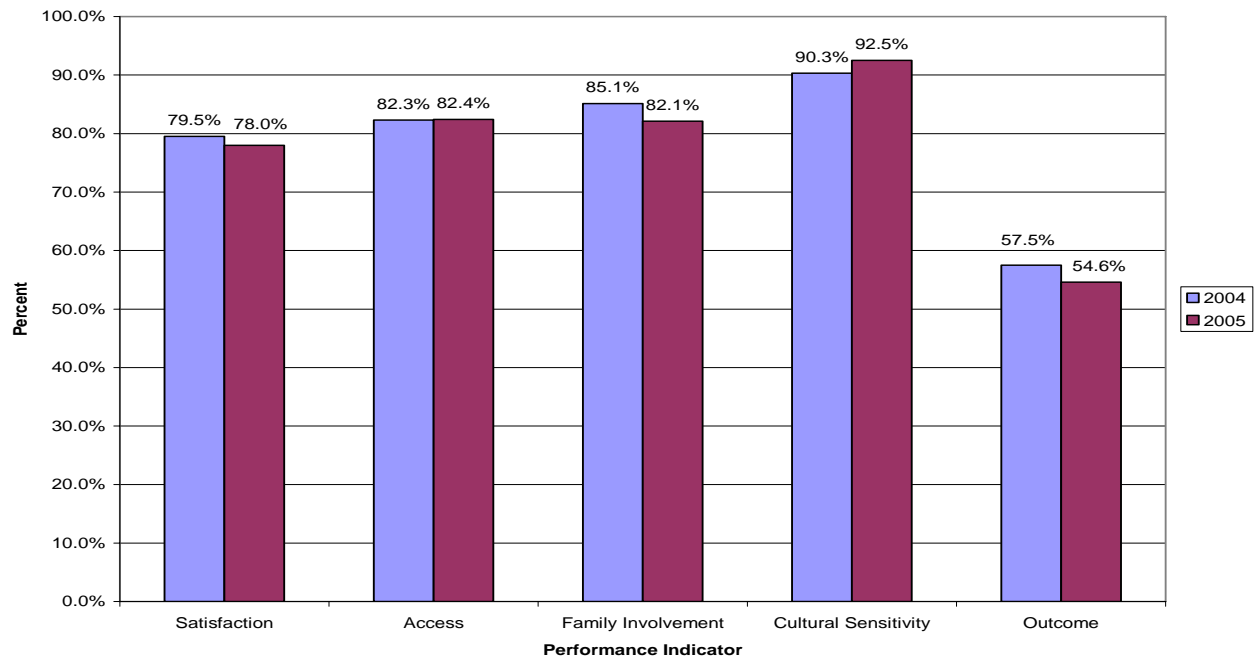
How Do Perceptions of Care Change Over Time for Youth Receiving Services?

With regard to differences related to service status, Chi square results were consistent with previous survey results in that caregivers of youth still receiving services reported significantly more positive perceptions of services in all domains ($p < .001$) than caregivers whose children were no longer in services. In order to compare results of surveys across time, sample differences on this variable are controlled by reporting separately for youth still receiving services and youth no longer in services. Results for the FY2004 and FY2005 surveys are displayed separately for each group below.

Figure 11 displays the results for youth who were still receiving services at the time of the two surveys. Comparing this year's findings to the previous administration of the YSSF for this group, there appears to be a downward trend in caregivers' perceptions of involvement in service planning and positive outcome. However, these changes are not significant. Given that previous survey findings have demonstrated that family involvement in treatment is one of the strongest predictors

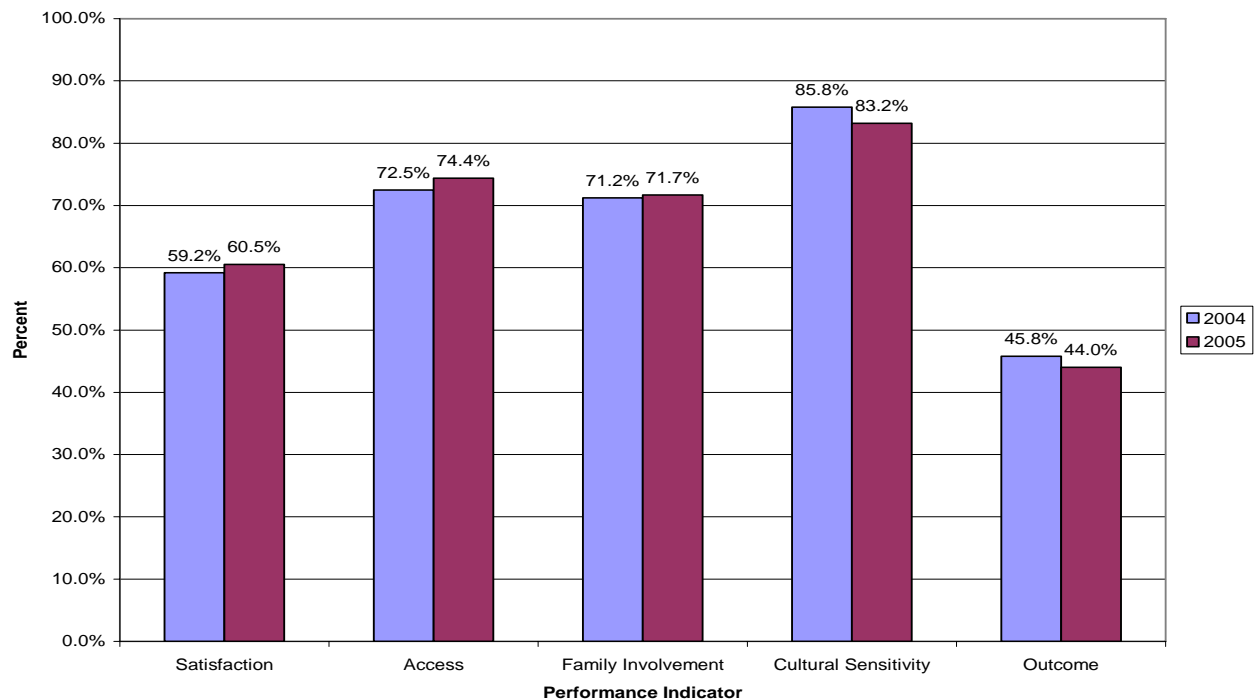
of positive outcomes, this trend should be monitored and policies developed to improve caregiver involvement and outcomes.

Figure 11: Caregiver Perceptions of Care by Time of Survey for Youth in Services



How Do Perceptions of Care Change Over Time for Youth No Longer in Services?

Figure 12: Caregiver Perceptions of Care by Time of Survey for Youth Not in Services



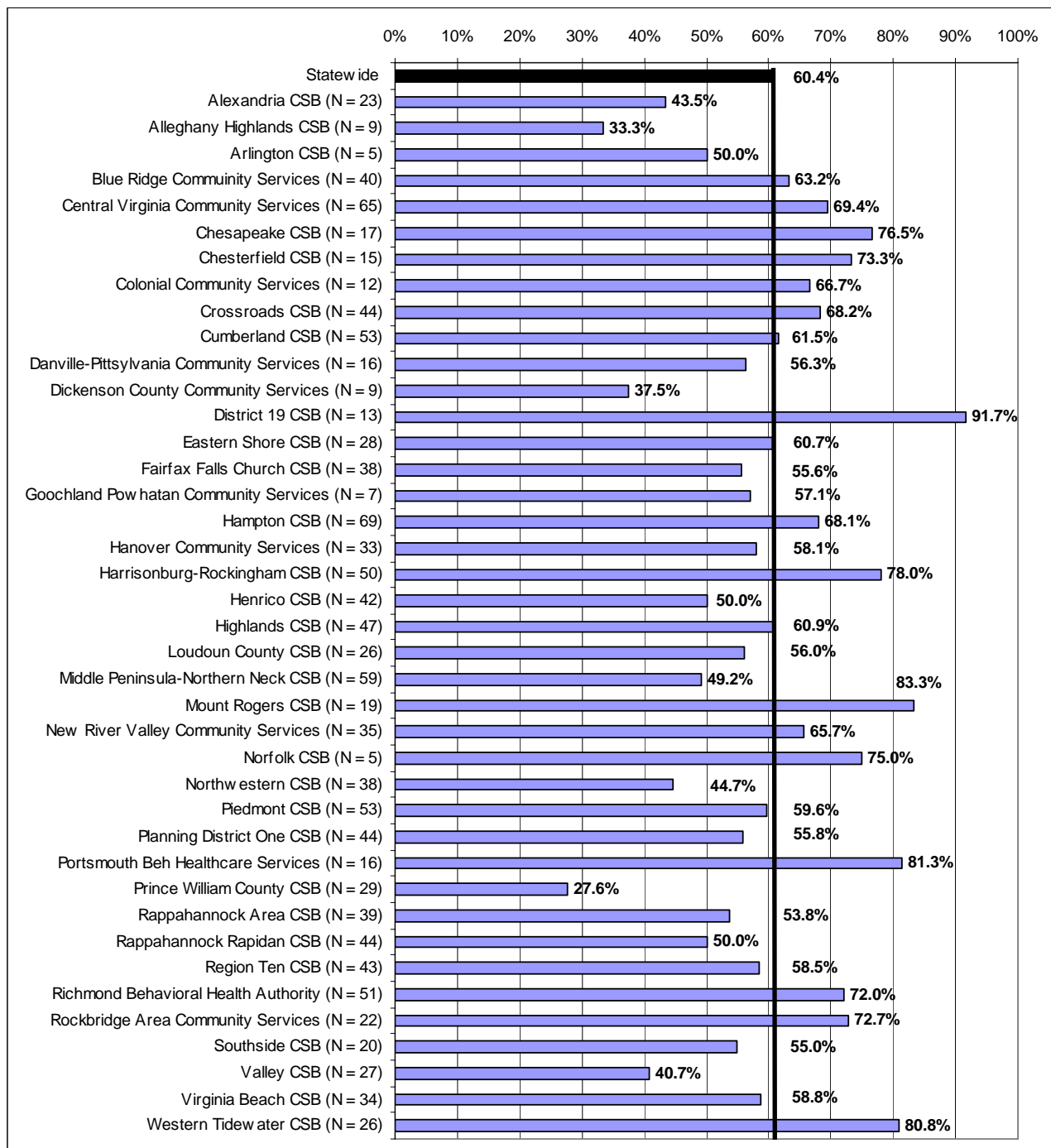
In FY2005, caregivers of youth who are no longer receiving services from a CSB reported perceptions of the care received to be similar to that reported in FY2004 (see Figure 12). In order to identify if there was a subgroup of caregivers with more negative perceptions of service, exploratory multivariate analysis was conducted to assess the relationship between demographic variables and the average performance indicator scale scores for this subgroup. Caregivers whose children were living with them were significantly more likely to report positive perceptions of outcomes than caregivers with children no longer living at home $F(1, 454) = 27.8, p < .001$. This finding suggests that programs that are successful in maintaining children in the home will have a positive impact on caregiver perceptions of system performance.

CSB Level Caregiver Perceptions of Services

In the following section, individual CSB ratings for the five indicator domains are presented with the statewide average for the domain included as a reference. These results are provided to assist CSBs in identifying possible areas of improvement. Due to the differences in demographic and treatment characteristics between CSBs and small sample sizes for many of the CSBs, it is important to avoid comparing CSBs on the basis of the following figures. The best use of this information is to track individual CSB progress over time.

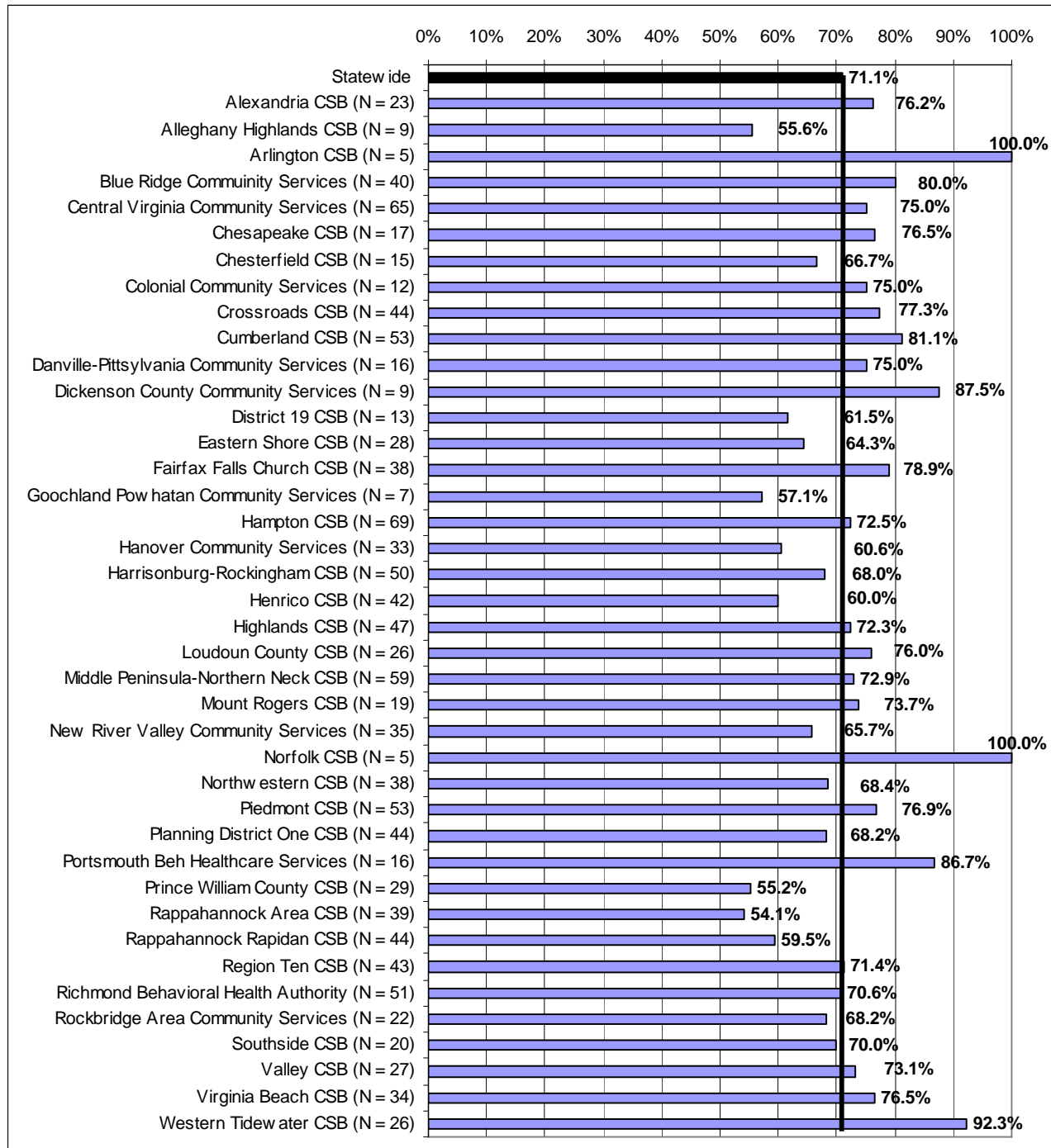
The first figure (Fig. 13) illustrates how much CSBs vary on the percentage of youth still receiving services at the time of the survey. CSBs with a higher percent of youth currently in services are more likely to have caregivers report positive perceptions of services on all domains. This variability should be taken into consideration when reviewing the CSB results on the subsequent figures.

Figure 13: Percent of Youth in Services at Time of Survey by CSB



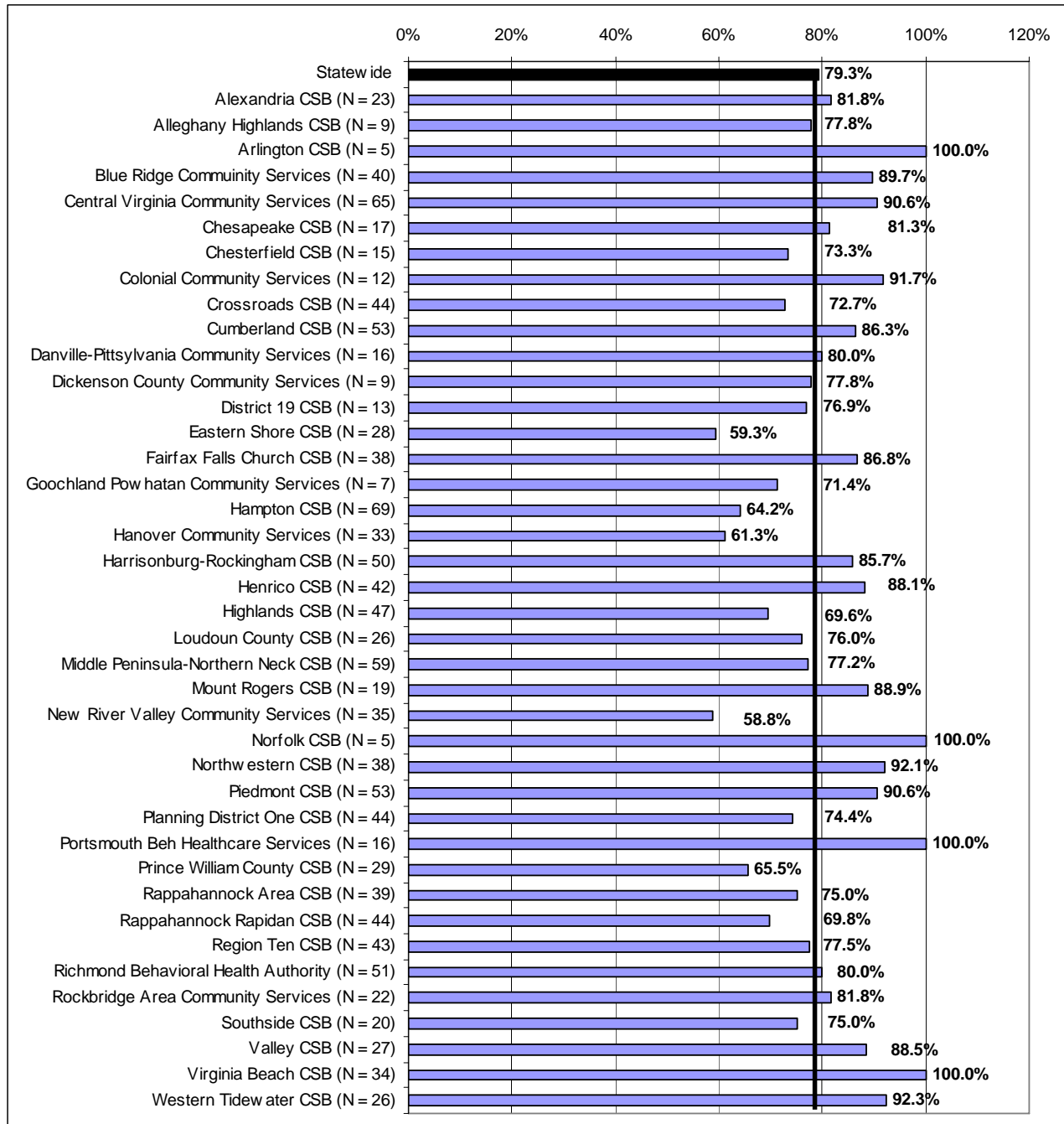
Note. Sample sizes at Alleghany Highlands, Arlington, Colonial, Dickenson County, District 19, Goochland Powhatan, and Norfolk are too small for valid comparisons.

Figure 14: Caregiver Perception of Services by CSB - Satisfaction Domain



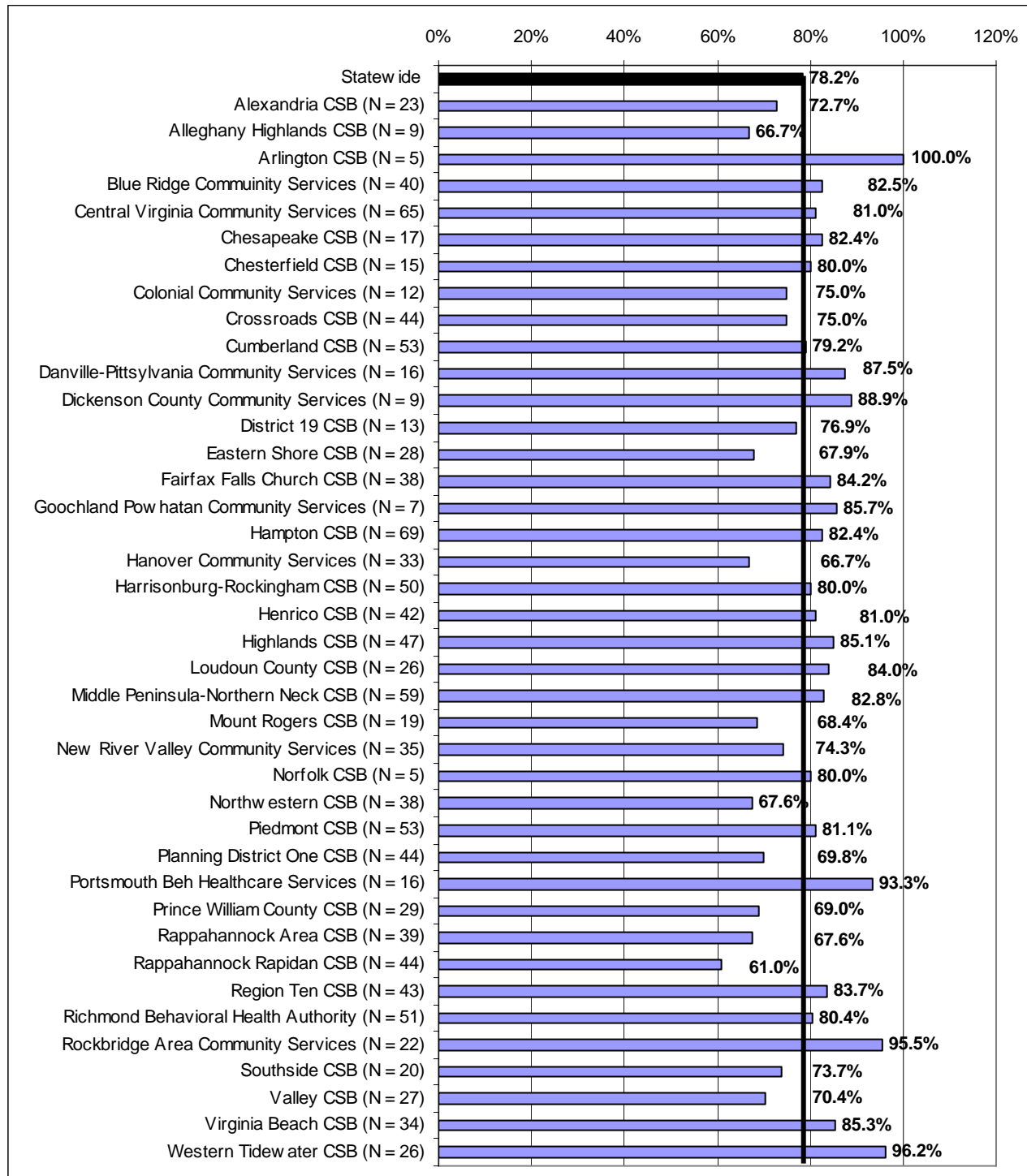
Note. Sample sizes at Alleghany Highlands, Arlington, Colonial, Dickenson County, District 19, Goochland Powhatan, and Norfolk are too small for valid comparisons.

Figure 15: Caregiver Perception of Services by CSB - Access Domain



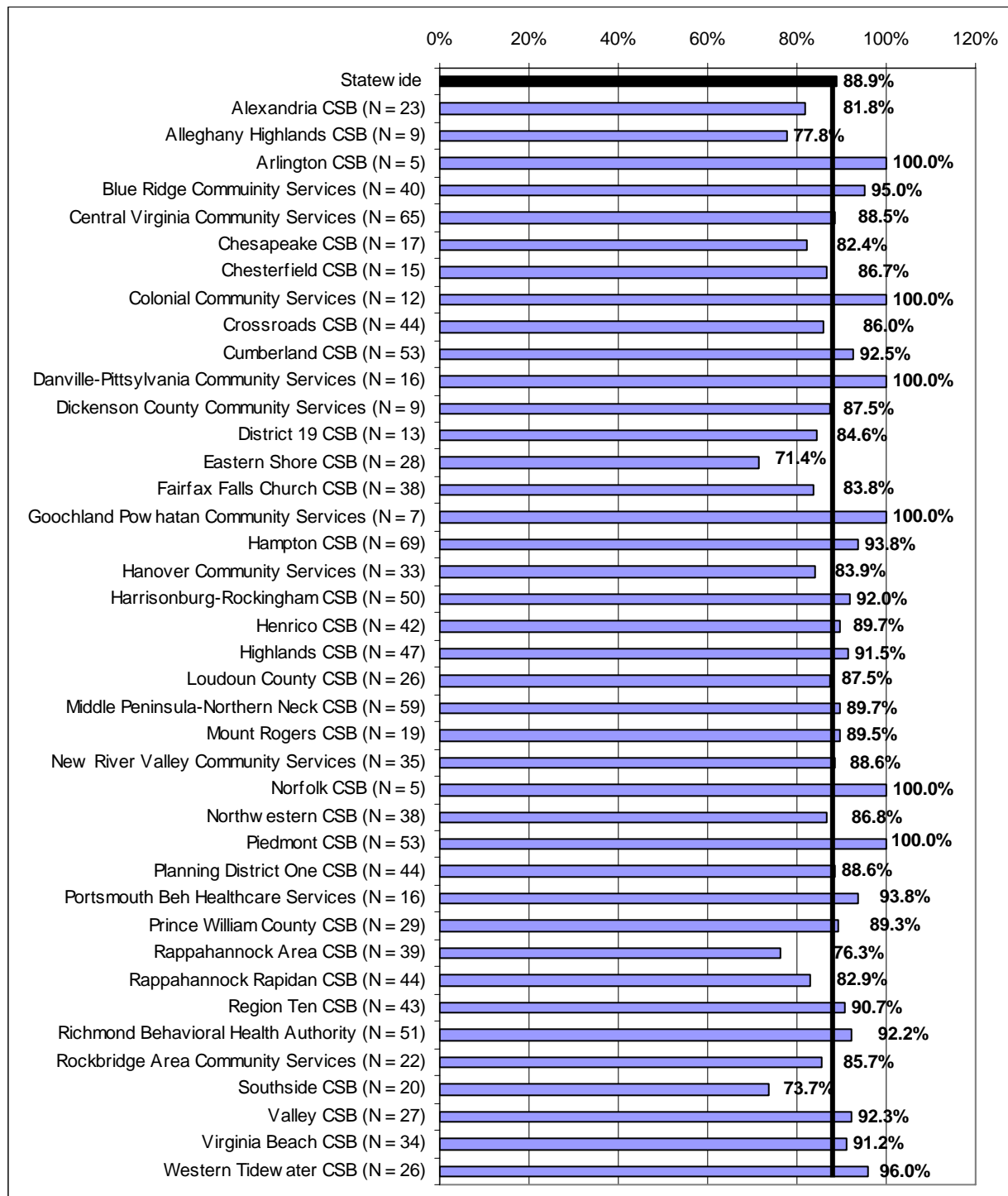
Note. Sample sizes at Alleghany Highlands, Arlington, Colonial, Dickenson County, District 19, Goochland Powhatan, and Norfolk are too small for valid comparisons.

Figure 16: Caregiver Perceptions of Services by CSB – Caregiver Participation Domain



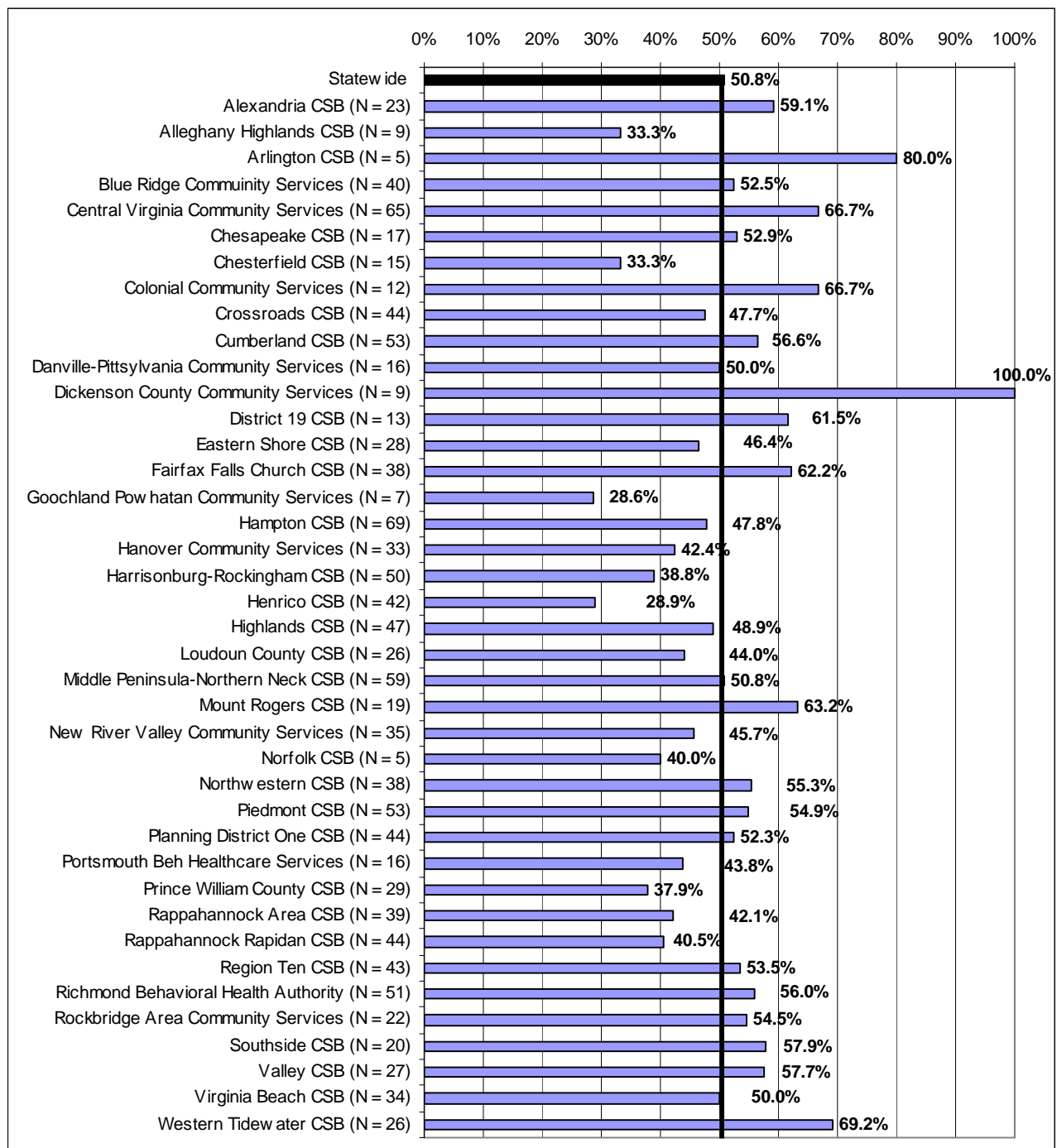
Note. Sample sizes at Alleghany Highlands, Arlington, Colonial, Dickenson County, District 19, Goochland Powhatan, and Norfolk are too small for valid comparisons.

Figure 17: Caregiver Perception of Services by CSB – Cultural Sensitivity Domain



Note. Sample sizes at Alleghany Highlands, Arlington, Colonial, Dickenson County, District 19, Goochland Powhatan, and Norfolk are too small for valid comparisons.

Figure 18: Caregiver Perceptions of Services by CSB – Outcome Domain



Note. Sample sizes at Alleghany Highlands, Arlington, Colonial, Dickenson County, District 19, Goochland Powhatan, and Norfolk are too small for valid comparisons.

CONCLUSION

In summary, caregivers of youth receiving CSB outpatient mental health services have a generally positive perception of those services. Highest ratings are seen in the area of caregiver perceptions of the cultural sensitivity of staff (89%). Caregiver perceptions of access to services, involvement in treatment, and satisfaction with services was also high, 79%, 78% and 71% of caregivers reporting positive perceptions, respectively. Finally, 51% of caregivers report that their child has improved as a result of services. While this is not significantly different from previous survey results, comparison to the national average suggests that there is room for improvement in the service system.

Several service variables had a significant impact on caregiver perceptions of services and suggest that better outcomes are reported when the youth have been in services for at least a year and are still receiving services. Lowest levels of satisfaction were found on the item, “My family got as much help as we needed for my child” indicating that 36% of families experienced barriers to getting sufficient amounts of service. In addition, a majority of caregivers (56%) reported that they were not “satisfied with their family life right now”. This significant decrease in the level of satisfaction with their current situation compared to caregivers in previous administrations of the survey is likely to have contributed to the slightly lower perceptions of outcome overall.

These findings were obtained through a mail distribution of surveys to a randomly selected set of caregivers of children who received outpatient mental health services in the FY 2005. Completed surveys were obtained from all 40 CSBs and comparison of the sample to the overall population of youth with SED indicated that the sample had similar demographic features to the larger population. The majority of the final sample of 1,272 youth were described as being male (65%), White (64%) adolescents (57%) on medication for emotional/behavioral difficulties (62%). They tended to have Medicaid insurance (62%) and to have been in services for more than one year (51%).

The methodology used for this report has several strengths and limitations. First, the use of random selection and the distribution of the surveys by mail ensures that every caregiver of a child receiving services had an equal chance of being selected for the survey and that the results included perceptions of services from those who may no longer be receiving services. This methodology increases the probability that caregivers who are dissatisfied with services will have the opportunity to respond. Therefore, the results are likely to reflect the perceptions of the overall population receiving services.

Second, there were no significant differences between the survey sample and the larger population on key sociodemographic variables available for comparison. Therefore, to the degree that there are no significant differences between those returning surveys and those who do not, these results can be interpreted to represent all caregivers of youth receiving outpatient services from CSBs.

One major limitation of this report is the cross-sectional nature of the survey. These findings represent the perceptions of caregivers at a single point in time and perceptions are subject to change over time. Without measures of baseline functioning for comparison, the survey measures of youth functioning can only be interpreted as a snapshot of how the youth are doing currently. Therefore, these indicators should not be viewed as a measure of the effectiveness of the services provided and, instead, should only be used to provide a picture of the system performance over time.

An additional limitation should be taken into consideration, especially when reviewing results for individual CSBs. Response rates by CSB ranged from 16.3% to 34.8% with a statewide average of 23.7%. While this is a fairly typical response rate for mail surveys, it does result in very small sample sizes for some CSBs. While sample sizes for each individual CSB are not sufficient to have confidence that the results are truly representative to the total population of youth receiving services at that CSB, the individual CSB results are provided to provide a rough estimate about how services at each CSB are perceived. Due to the small sample sizes, CSBs should not be compared to each other on the basis of these findings.

Despite these limitations, the results of this survey provide valid and useful information about the outpatient services provided to children and adolescents through Virginia's public mental health system. The primary benefit of using a standardized survey repeatedly is to provide a basis for monitoring change in the service system over time. This report looked at perceptions of care over time for two separate groups, those still receiving services and those no longer in services. For both groups, caregiver perceptions of care were similar to those reported in FY2004. For youth currently in services, there was a slight downward trend in caregivers' perceptions of involvement in service planning and positive outcome. However, these changes were not significant. It will be important to continue monitoring this trend and identify strategies to improve caregiver perceptions of positive outcomes.

Findings from the FY2004 report can assist in identifying the primary areas to target for change. It found several factors contributed most to positive perceptions of outcome. These factors include 1) caregiver involvement in services, 2) no out of home placements, and 3) caregiver satisfaction with the type and amount of services. These findings are supported with the results from the current survey. Therefore, in order to improve outcomes, policies are needed that encourage providers to use the following "best practices" more frequently.

- involve caregivers in choosing treatment services and goals for their children
- provide sufficient services to meet the child's needs (many children and adolescents with serious emotional and behavioral difficulties will need services for more than one year)
- provide services that are effective in preventing out of home placements.

The Department of Mental Health, Mental Retardation and Substance Abuse Services has recently initiated a demonstration project to evaluate the use of evidence-based practices within the public service system. These practices have been proven to be effective in preventing out of home placements elsewhere. Repeated assessment of the statewide service system will provide an opportunity to determine if these evidence-based practices can have an impact on caregiver perceptions of positive outcome.

APPENDIX A
Youth Services Survey for Families

YOUTH SERVICES SURVEY FOR FAMILIES (YSS-F)

Please help our agency make services better by answering some questions about the services your child received **OVER THE LAST 6 MONTHS**. Your answers are confidential and will not influence the services you or your child receive. Please indicate if you **Strongly Disagree, Disagree, Are Undecided, Agree, or Strongly Agree** with each of the statements below. Put a cross (X) in the box that best describes your answer. Thank you!!!

[illegible]

Molly Brunk, 1999. This instrument was developed as part of the State Indicator Project funded by the Center for Mental Health Services (CMHS). It was adapted from the Family Satisfaction Questionnaire used with the CMHS Comprehensive Community Mental Services for Children and their Families Program and the MHSIP Consumer Survey. Version 6/5/01

For the following items, please think about people in your life other than your service providers.

As a result of the services my child and/or family received, I have more...

- 26. People who will listen when I need to talk.
- 27. Family or friends who will help in a crisis.
- 28. Time to spend alone or with friends.
- 29. People I can talk to about my child's problems.
- 30. People at my child's school who help me with my child.
- 31. Time to work in a paid job.
- 32. Time to help my child to do activities with approved friends.

Not Applicable	Disagree	Somewhat Agree	Agree	Strongly Agree

Please answer the following questions to let us know how your child is doing.

- 33. Is your child still getting services from this Center? ☐ Yes ☐ No
- 34. How long did your child receive services from this Center?
(If you are currently receiving services, how long have you been receiving services?)
☐ Less than 1 month ☐ 1 – 2 months ☐ 3 – 5 months ☐ 6 months to 1 year ☐ More than 1 year
- 35. Is your child currently living with you? ☐ Yes ☐ No
- 36. Are you satisfied with your child's current living arrangement? ☐ Yes ☐ No
- 37. Has your child lived in any of the following places **in the last 6 months?** (CHECK ALL THAT APPLY)

- | | |
|--|--|
| <input type="checkbox"/> a. With one or both parents | <input type="checkbox"/> g. Group home |
| <input type="checkbox"/> b. With another family member | <input type="checkbox"/> h. Residential treatment center |
| <input type="checkbox"/> c. Foster home | <input type="checkbox"/> i. Hospital |
| <input type="checkbox"/> d. Therapeutic foster home | <input type="checkbox"/> j. Local jail or detention facility |
| <input type="checkbox"/> e. Crisis shelter | <input type="checkbox"/> k. State correctional facility |
| <input type="checkbox"/> f. Homeless shelter | <input type="checkbox"/> l. Runaway/homeless/on the streets |
| | <input type="checkbox"/> m. Other |

- 38. How many times has your child moved in the **last month?**
- 39. How many days has your child been homeless in the **last six months?**
- 40. Is your child on medication for emotional/behavioral problems? ☐ Yes ☐ No
- 40a. If yes, did the doctor or nurse tell you and/or your child what side effects to watch for? ☐ Yes ☐ No
- 41. Was your child arrested during the past 12 months? ☐ Yes ☐ No
- 42. Was your child arrested during the 12 months prior to that? ☐ Yes ☐ No
- 43. Was your child expelled or suspended during the past 12 months? ☐ Yes ☐ No
- 44. Was your child expelled or suspended during the 12 months prior to that? ☐ Yes ☐ No
- 45. Compared to before receiving services, the number of days my child is now in school is:
☐ greater ☐ about the same ☐ less ☐ does not apply

- 33. What is your relationship to the child?
☐ Parent ☐ Other family member ☐ Foster parent ☐ Case Manager (DSS) ☐ Other: _____
- 34. What type of insurance does your child have?
☐ Medicaid ☐ FAMIS ☐ Other Insurance ☐ No Insurance

- 35. What has been the most helpful thing about the services you and your child received over the **last 6 months?**

- 36. What would improve services here? _____

Thank you for taking the time to answer these questions!

APPENDIX B

Child Mental Health Priority Classification Form

**CHILD/ADOLESCENT MENTAL HEALTH AND SUBSTANCE ABUSE
PRIORITY POPULATION CLASSIFICATION FORM**

The purpose of this form is to determine whether an individual, **age 17 years or younger**, meets the criteria for inclusion in the child and adolescent mental health and substance abuse priority populations. Please follow each step as directed.

DEMOGRAPHIC INFORMATION

Consumer Name: _____ CSB Name: _____
Consumer ID: _____ Date of Assessment: _____
Date of Birth: _____
Current Status: ☐ In service ☐ New Admission ☐ Annual Assessment ☐ Re-Admission

STEP 1. EVALUATE FOR CHILD MENTAL HEALTH PRIORITY POPULATION

CRITERION A: Diagnostic Criteria

A person who meets DSM IV diagnostic criteria for any of the following disorders and who is presenting for related treatment should be considered a part of this priority population. Please note that for Major Depression, the disorder must be specified as “severe”.

Please check the diagnostic category that applies to this consumer (if any).

Psychotic Disorders

_____ Schizophrenia, all types (295.10, 295.20, 295.30, 295.60, 295.90)
_____ Schizophreniform Disorder (295.40)
_____ Schizoaffective Disorder (295.70)
_____ Psychotic Disorder, NOS (298.9x)

Depression and Bipolar Disorders

_____ Bipolar I Disorder (296.40, 296.4x, 296.6x, 296.5x, 296.7)
_____ Bipolar II Disorder (296.89)
_____ Bipolar Disorder, NOS (296.8)
_____ Major Depressive Disorder, Severe (296.23, 296.24, 296.33, 296.34)

Does youth meet criteria for one of the disorders listed above?

A. Yes. Check “Meets criteria for Child Mental Health Priority Population” in Mental Health Assessment Summary on page 3.

B. No. Continue to evaluation of functional criteria on next page.

CRITERION B: Functional Impairment

If the consumer has a diagnosis other than one listed on page 1 please document the consumer's DSM IV diagnosis below (include V codes if applicable). If consumer has an Axis II diagnosis of mental retardation, complete the Mental Retardation Classification Form. Note. A diagnosis is not necessary for inclusion in the priority population.

Axis I diagnosis: (primary) _____ (secondary) _____ (tertiary) _____
Axis II diagnosis: (primary) _____ (secondary) _____

Written documentation in the youth's record must support that the functional criteria below are met as a direct result or manifestation of the youth's emotional or behavioral problems.

CHECK ALL FUNCTIONAL CRITERIA THAT APPLY

I. Problems in the last 12 months that are significantly disabling based upon the social functioning of most children their age. Youth has:

_____ attempted suicide one or more times, or has had a specific plan for committing suicide one or more times (a current or past history of suicidal ideation alone is not sufficient to meet this criterion).

_____ been hospitalized in a public or private psychiatric facility.

_____ been enrolled in a special education program for the emotionally handicapped (with an IEP), or is scheduled for an IEP to determine placement in a special education program for the emotionally handicapped.

_____ routinely missed two or more days of school or work per month as a direct result of the symptoms associated with their mental illness (i.e., do not include absence due to physical illness).

_____ a drop in school performance/productivity to point that there is a risk of failing at least half of courses.

_____ exhibited behavior that was so disruptive/aggressive that youth presents threat to the safety of others in the home or in the community.

_____ persistent problems/difficulties relating to peers that result in few, if any, positive peer relationships.

_____ at least one family relationship characterized by constant conflict that is disruptive to family environment.

_____ required intervention by at least one agency that is not the CSB.

II. Problems in personality development and social functioning exhibited over at least one year's time

_____ problems have lasted at least one year.

_____ problems are expected to last at least one year without services.

Does child meet at least two criteria in Section I AND one criterion in Section II above?

A. Yes. Check "Meets Criteria for Child Mental Health Priority Population" in Mental Health Assessment Summary

B. No. Continue to Step 2 and complete evaluation for the At – Risk Priority Population

APPENDIX C

Table - 2. Response Rate by CSB

	Number Sampled	Completed Surveys	Response Rate
Alexandria CSB	84	23	27.4%
Allegheny Highlands Community Services Board	41	9	22.0%
Arlington CSB	23	5	21.7%
Blue Ridge Community Services	215	40	18.6%
Central Virginia Community Services	341	65	19.1%
Chesapeake CSB	83	17	20.5%
Chesterfield CSB	79	15	19.2%
Colonial Community Services	56	12	21.4%
Crossroads CSB	214	44	20.6%
Cumberland Community Services Board	225	53	23.6%
Danville-Pittsylvania Community Services	46	16	34.8%
Dickenson County Community Services	37	9	24.3%
District 19 CSB	57	13	22.8%
Eastern Shore CSB	142	28	19.7%
Fairfax Falls Church CSB	225	38	16.9%
Goochland Powhatan Community Services	23	7	30.4%
Hampton CSB	294	69	23.5%
Hanover Community Services	145	33	22.8%
Harrisonburg-Rockingham CSB	170	50	29.4%
Henrico CSB	215	42	19.5%
Highlands CSB	214	47	22.0%
Loudoun County CSB	93	26	28.0%
Middle Peninsula-Northern Neck CSB	215	59	27.4%
Mount Rogers CSB	80	19	23.8%
New River Valley Community Services	215	35	16.3%
Norfolk CSB	24	5	20.8%
Northwestern Community Services Board	215	38	17.7%
Piedmont CSB	225	53	23.6%
Planning District One CSB	247	44	17.8%
Portsmouth Dept of Behavioral Healthcare Services	79	16	20.3%
Prince William County CSB	144	29	20.1%
Rappahannock Area Community Services Board	215	39	18.1%
Rappahannock Rapidan CSB	209	44	21.1%
Region Ten CSB	215	43	20.0%
Richmond Behavioral Health Authority	297	51	17.2%
Rockbridge Area Community Services	76	22	28.9%
Southside CSB	88	20	22.7%
Valley CSB	126	27	21.4%
Virginia Beach Community Services Board	149	34	22.8%
Western Tidewater CSB	81	26	32.1%
Statewide Total	5921	1272	21.5%
Missing CSB Code		7	

Note. Response rates more than 5% above or below the state rate are highlighted above.

APPENDIX D

Table 3. Descriptive Statistics for Responses to YSS_F Items (abbreviated)

	Mean ^a	Standard Deviation	N	% Agree ^b	% Disagree ^b
1. Overall, I am satisfied with the services my child received.	3.96	1.07	1265	80.3%	12.4%
2. I helped to choose my child's services.	3.85	1.03	1252	78.8%	14.4%
3. I helped to choose my child's treatment goals.	3.84	1.03	1247	76.8%	14.0%
4. The people helping us stuck with us	3.95	1.10	1248	77.0%	12.5%
5. I felt my child had someone to talk to	3.88	1.10	1251	75.8%	13.3%
6. I participated in child's treatment	4.19	.824	1254	89.9%	5.5%
7. The services were right for us.	3.85	1.07	1248	74.0%	12.5%
8. The location was convenient for us.	4.14	.89	1259	87.8%	7.9%
9. Services available at convenient times.	4.05	.94	1249	84.3%	9.3%
10. My calls were returned in 24 hours.	3.87	1.07	1246	77.3%	14.2%
11. My family got the help we wanted	3.74	1.17	1248	71.0%	16.3%
12. My family got as much help as we needed	3.59	1.21	1239	64.2%	20.5%
13. The people I went to spent enough time with me.	3.91	1.05	1248	79.0%	12.1%
14. Staff treated me with respect.	4.30	.80	1260	92.1%	3.7%
15. Staff respected my family's religious/spiritual beliefs.	4.18	.73	1230	86.7%	1.5%
16. Staff spoke in a way that I understood.	4.30	.71	1253	94.6%	2.9%
17. Staff were sensitive to my cultural/ethnic background.	4.12	.76	1216	85.4%	2.9%
18. My child's symptoms are not bothering him/her as much	3.28	1.23	1245	51.3%	27.1%
19. My child is better at handling daily life.	3.36	1.20	1246	55.6%	24.6%
20. My child gets along better with family members.	3.41	1.16	1250	58.8%	22.6%
21. My child gets along better with others	3.49	1.12	1243	61.5%	20.1%
22. My child is doing better in school and/or work.	3.43	1.18	1240	57.5%	22.3%
23. My child is better able to cope when things go wrong.	3.19	1.19	1246	47.8%	28.8%
24. My child is better able to do things he/she wants to do.	3.47	1.08	1242	59.7%	19.2%
25. I am satisfied with our family life right now.	3.33	1.21	1249	43.9%	25.1%
26 ^c . People who will listen when I need to talk	3.63	.90	1135	88.5%	11.5%
27. Family or friends who will help in a crisis.	3.61	.965	1138	83.8%	16.2%
28. Time to spend alone or with friends.	3.42	.953	1102	78.4%	21.6%
29. People I can talk to about my child's problems.	3.65	.936	1142	85.7%	14.3%
30. People at my child's school who help me with my child	3.62	1.00	1083	82.8%	17.2%
31. Time to work in a paid job.	3.45	1.01	831	76.2%	23.8%
32. Time to help my child do activities with approved friends	3.26	1.21	1192	86.9%	13.1%

^aScale ranges from 1 "Strongly Disagree" to 5 "Strongly Agree." Higher mean scores indicate greater satisfaction.

^bPercentages in the agree column include those who responded "agree" or "strongly agree" to the statement. Percentages in the disagree column include those who responded "disagree" or "strongly disagree". Percentages for "undecided" are not shown, but can be calculated by subtracting the total of the % agree and the % disagree from 100%.

^cScale for items 26 – 32 ranges from 2 "Disagree" to 5 "Strongly Agree". Percentages in agree column include categories of "somewhat agree", "agree", "strongly agree".

APPENDIX E

Table 4. Demographic Information Statewide and by HPR

	HPR I	HPR II	HPR III	HPR IV	HPR V	STATE CHILD MH SAMPLE
TOTAL CASES	263	121	390	225	266	1264

	Gender					
Male	66.9%	60.3%	62.7%	67.1%	66.9%	65%
Female	33.1%	39.7%	37.3%	32.9%	33.1%	35%

	Race					
White	77.1%	51.7%	78.7%	43.0%	51.9%	63.9%
African American	16.4%	24.6%	19.5%	54.8%	44.4%	30.8%
Asian/Pacific Islander	0%	4.2%	.3%	0%	.4%	.6%
American	.4%	0%	0%	1.0%	0%	.3%
Indian/Alaskan Native						
Other	6.1%	19.5%	1.5%	1.4%	3.4%	4.5%

Hispanic	4.7%	20.3%	1.3%	1.8%	3.6%	4.4%
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Average Age	13.45	13.92	13.39	13.21	14.06	13.56
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	Residence in Last Six Months ^a					
	<i>N</i> = 214	<i>N</i> = 95	<i>N</i> = 313	<i>N</i> = 171	<i>N</i> = 191	<i>N</i> = 997
Private residence	75.5%	63.2%	76.4%	81.0%	82.6%	76.7%
Foster home	5.1%	6.1%	5.0%	2.9%	3.7%	4.7%
Therapeutic Foster home	1.9%	3.1%	3.1%	4.7%	5.2%	3.6%
Shelter	1.4%	6.1%	.6%	0%	1.0%	1.3%
Group home	2.8%	5.1%	6.0%	2.9%	2.6%	4.0%
Residential Treatment	7.5%	13.3%	4.1%	4.1%	4.2%	5.7%
Hospital	4.2%	6.1%	4.7%	1.2%	3.1%	3.8%
Local Jail/Correctional Facility	6.5%	12.2%	5.7%	4.1%	2.6%	5.7%
State Corrections Setting	.9%	2.0%	.6%	0%	1.0%	.8%
On run/homeless/on street	2.8%	3.1%	1.3%	.6%	.5%	1.5%
Other	5.6%	5.1%	2.8%	4.1%	52%	4.3%

^aAll settings in which a youth resides during the six month period are included. Some youth lived in multiple settings.

Currently Living with Caregiver	83.3%	78.8%	62.0%	90.8%	88.7%	87.2%
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	Insurance Type					
Medicaid	58.2%	39.8%	74.7%	63.8%	54.1%	61.8%
FAMIS	9.8%	6.5%	8.4%	13.6%	12.6%	10.2%
Other insurance	25.4%	42.6%	13.4%	19.6%	30.1%	23.2%
No insurance	6.6%	11.1%	3.5%	3.0%	3.3%	4.7%

	Length of Time in Service					
Less than 1 month	5.1%	1.8%	3.2%	3.7%	3.1%	3.5%
1 – 2 months	6.7%	6.3%	3.5%	4.7%	6.3%	5.3%
3 – 5 months	11.4%	12.6%	13.3%	12.6%	13.3%	12.7%
6 months – 1 year	27.1%	31.5%	33.3%	24.8%	21.2%	27.8%
More than 1 year	49.8%	47.7%	46.7%	54.2%	56.1%	50.7%

Currently in Services	57.5%	46.2%	62.0%	64.4%	64.5%	60.4%
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	Medical Issues					
On psychotropic meds	62.5%	42.9%	58.5%	69.8%	72.1%	62.7%
Informed of side effects	74.9%	65.7%	75.1%	79.1%	80.2%	76.4%

	Performance Indicator Results					
Good access to services	81.1%	78.8%	81.6%	76.1%	79.2%	79.3%
Participation in treatment planning	74.3%	79.0%	79.1%	76.8%	82.9%	78.2%
Cultural sensitivity of staff	86.8%	86.2%	91.9%	87.1%	89.9%	88.9%
General satisfaction	65.8%	72.9%	74.4%	67.3%	75.8%	71.1%
Social Connectedness	79.0%	75.9%	82.6%	77.7%	83.1%	80.5%
Positive outcome	47.7%	52.5%	55.6%	45.7%	51.5%	50.8%

APPENDIX F

Factor Analysis Findings

Several new items were added to the survey to assess the domain of social connectedness and to evaluate other new items being piloted for the reporting the *National Outcomes Measures*. The relationship of the new items with the original survey items was assessed using Principal Components factor analysis. Since it was expected that the factors would be correlated with each other, the analysis used Oblimin Rotation with Kaiser Normalization. Cases were excluded pairwise when there were missing values.

All the items were first converted to the same scale and then a six factor solution was forced to see if the original domains would emerge along with the new domain of social connectedness. This solution accounted for 72% of the variance with acceptable loadings. The pattern matrix below illustrates the factor loadings of each item. Factor loadings < .20 were suppressed from the display.

Pattern Matrix ^a

	Component					
	1	2	3	4	5	6
FS1	.637					
FS2					.819	
FS3					.814	
FS4	.657					
FS5	.703					
FS6				.288	.668	
FS7	.619				.210	
FS8						.944
FS9	.401					.505
FS10	.523			.208		.213
FS11	.635	-.221				
FS12	.593	-.272				
FS13	.518			.258		
FS14	.241			.584		
FS15				.879		
FS16				.754		
FS17				.861		
FS18		-.839				
FS19		-.901				
FS20		-.864				
FS21		-.862				
FS22		-.788				
FS23		-.901				
FS24		-.792				
FS25		-.742				
FS26	.285		.734			
FS27			.876			
FS28			.816			
FS29			.812			
FS30			.626			
FS31			.607			
FS32		-.236	.624			

Extraction Method: Principal Component Analysis.

Rotation Method: Oblimin with Kaiser Normalization.

a. Rotation converged in 8 iterations.

These results are consistent with the predicted domains where the social connectedness items loaded on a single new factor and the factor structure for the original items was unchanged. This indicates that the new measure is an independent construct that contributes new information to the survey.

Factor	Description	Questions
1	Satisfaction	FS1, FS4, FS5, FS7, FS9 – FS13
2	Outcome	FS18 – FS25
3	Social Connectedness	FS26 - FS32
4	Cultural Sensitivity	FS14 – FS17
5	Family Involvement	FS2, FS3, FS6
6	Access	FS8 – FS9

Two new items loaded on the outcome factor as intended but two new items hypothesized to be related to the access items actually loaded on the satisfaction factor. Access continues to be a very weak factor that may be better described as convenience. Given that anyone responding to the survey was able to access services, this domain may be difficult to measure through a survey.

Recommendations for which items to include in the new version of the Youth Services Survey were based on the Rasch analysis described in Appendix G.

APPENDIX G

Rasch Analysis

A series of Rasch analyses was conducted on each of the five YSSF subscales: Cultural Sensitivity, Outcome, Social Connectedness, Family Involvement and Satisfaction. In each of these analyses, principal components analysis of Rasch item residuals was used to examine the unidimensionality of the scale, overall fit and item fit to the Rasch model, rating scale structure, person and item reliability. In some cases, such as when the initial analyses revealed the presence of multidimensionality, poorly fitting items, or problems with the rating scale, a reassessment was undertaken.

Introduction. The Rasch rating scale model (Wright & Masters, 1982) used for this analysis, estimates the probability that a respondent will choose a particular response category for an item as:

$$\ln \frac{P_{nij}}{P_{ni(j-1)}} = B_n - D_i - F_j,$$

where P_{nij} is the probability of respondent n scoring in category j of item i , $P_{ni(j-1)}$ is the probability of respondent n scoring in category $j-1$ of item i , B_n is the person measure of respondent n , D_i is the difficulty of item i , and F_j is the difficulty of category step j . Rating scale categories are ordered steps on the measurement scale. Completing the j^{th} step can be thought of as choosing the j^{th} alternative over the $(j-1)^{\text{th}}$ in the response to the item (Litz et al., 1990).

Rasch analysis places persons (B_n) and items (D_i) on the same measurement scale (illustrated in the variable map on p. 20) where the unit of measurement is the logit (log odds unit). Person reliability in Rasch is analogous to Cronbach's alpha in traditional test theory. It gives an idea of how reliably persons are placed on the scale. Since Rasch places both persons and items on the same scale, reliability can be estimated for items as well as for persons. The Winsteps Computer Program was used for these calculations (Linacre, 2005). Since reliability estimates range from 0 to 1.00 on scales that are actually infinite in either direction (Linacre, 2002), Rasch analysis provides an alternative statistic, separation. Separation estimates the number of levels from 0 to infinity into which the distribution of persons or items can be reliably distinguished (Smith, E., 2001).

Rather than tailor models to fit the data, Rasch analysis holds that the one parameter model fulfills the requirements of fundamental measurement (Wright, 1997), e.g., linear interval scale, and examines the data, i.e., items and persons, for flaws or problems that are indicated by their failure to fit the model.

Rasch analysis provides fit statistics to test assumptions of fundamental measurement (Wright & Stone, 1979). "Fitting the model" simply means meeting basic assumptions of measurement, e.g., high scorers should endorse or get right almost all of the easy items. Once identified, persons and items that "misfit" can then be examined qualitatively to determine the causes of the problems. Problems may include items with confusing wording or items that assess a construct that is different from the principal one being measured, i.e., multidimensionality. Understanding poor fit can lead to improving or dropping items.

The fit of the data to the model is evaluated by fit statistics that are calculated for both persons and items. The Rasch model provides two indicators of misfit: infit and outfit. These fit statistics have the form of χ^2 statistics divided by their degrees of freedom. The infit is sensitive to unexpected behavior affecting responses to items near the person ability level and the outfit is outlier sensitive. Mean square fit statistics are defined such that the model-specified uniform value of randomness is 1.0 (Wright & Stone, 1979). Person fit indicates the extent to which the person's

performance is consistent with the way the items are used by the other respondents. Item fit indicates the extent to which the use of a particular item is consistent with the way the sample respondents have responded to the other items. For this type of analysis, values between .75 and 1.33 are considered acceptable (Smith, R., 2000, Wilson, 2005). In addition to fit statistics, principal component analysis of residuals is used to examine whether a substantial factor exists in the residuals after the primary measurement dimension has been estimated (Linacre, 1998; Smith, E., 2002).

Results. The results indicated three factors in the principal component analysis of Rasch measures and in the scree plot of raw scores. Constraining the analysis to three factors yielded three interpretable factors: satisfaction, outcomes, and social connectedness. Two of these, Outcomes and Social Connectedness conformed to original scales, but Satisfaction incorporated Family Involvement and Cultural Sensitivity. In addition, all of the YSSF items could be included in a single scale of Service Success. This scale could be treated as unidimensional, i.e., valid to use one total score, since it has a strong principal measurement dimension and high person reliability.

Several items were identified that evidenced lack of fit to the Rasch model and suggest that the measure could be improved if these were eliminated. These included:

- 7. The services my child and/or family received were right for us.
- 22. My child is doing better in school and/or work.
- 25. I am satisfied with our family life right now.
- 30. I have more people at my child's school who help me with my child
- 31. I have more time to work in a paid job

Reliability statistics for the scales when the items above are removed are as follows. Differences between Cronbach alpha and person reliability statistics are found when there is strong floor or ceiling effects.

Outcome Scale (<i>items account for 77% of variance</i>)		
	Cronbach alpha	.96
	Person reliability	.87
Social Connectedness (<i>items account for 62% of variance</i>)		
	Cronbach alpha	.96
	Person reliability	.74
Satisfaction/Quality (<i>items account for 67% of variance</i>)		
	Cronbach alpha	.96
	Person reliability	.89
Total Scale (<i>items account for 68% of variance</i>)		
	Cronbach alpha	.96
	Person reliability	.93

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